

Title (en)
Device for tempering objects

Title (de)
Vorrichtung zum Tempern von Gegenständen

Title (fr)
Dispositif pour le recuit d'objets

Publication
EP 2085490 B1 20131211 (DE)

Application
EP 09000623 A 20090117

Priority
DE 102008006640 A 20080129

Abstract (en)
[origin: EP2085490A2] The device comprises first- (18) and second annealing chambers (32), which both have an inlet (20, 34) and an outlet (22, 36), a conveyer system for carrier structures (54, 56) loaded with annealing articles, a treatment device (108) for quenching the articles, and a switching device (98, 112, 124). A transfer area is arranged between the outlet of the first chamber and the inlet of the second chamber. The carrier structures are conveyed in a passage through the chambers. The conveyer system comprises a transition region, by which the carrier structures are conveyed into the transfer area. The device comprises first- (18) and second annealing chambers (32), which both have an inlet (20, 34) and an outlet (22, 36), a conveyer system for carrier structures (54, 56) loaded with annealing articles, a treatment device (108) for quenching the articles, and a switching device (98, 112, 124). A transfer area is arranged between the outlet of the first annealing chamber and the inlet of the second annealing chamber. The carrier structures are conveyed in a passage through the annealing chambers and the conveyer system comprises a transition region, by which the carrier structures are conveyed into the transfer area. The articles are quenched after leaving the first annealing chamber and before entering the second annealing chamber. By the switching device, the article from the first annealing chamber is intermountable on the carrier structure with respect to the article from the treatment device. The treatment device comprises a quenching basin filled with a liquid. The articles are bringable by the switching device, which comprises a lifting and lowering station with a carrier table, on which the article moved from transition region. The article is lowerable into the quenching basin by the lowering station. The switching device comprises a device, on which the quenched article is temporarily stored until the article coming from the first annealing chamber is removed by the carrier structure. The annealing chamber is an inner chamber of a furnace, which is lockable with a furnace gate, which is constructed from gate segments detached into one another and is opened in the way that an opening is producible in a region, in which the gate segment is arranged. The furnace has dimensions such that several layers of the carrier structures stacked one above the other are conveyed through the dimension. The gate segment is arranged in its closing position on height of the layer of carrier structures.

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CN109234516A; CN110307718A; CN111235376A; EP2886987A1; US2015176906A1; CN116379776A; CN107460300A; US2018306513A1; CN116970785A; WO2024017601A1

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